This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1. (Currently Amended) An apparatus comprising:

a device configured to output a customer premises equipment (CPE) identifier; and a modem in communication with the device, the modem receiving the CPE identifier and configured to scan downstream channels of a information distribution system for a matching downstream channel descriptor (DCD)channel information message, the matching DCD-channel information message having a DCD-channel information message identifier that matches the CPE identifier, the modem tuning to one or more tunnels identified in the matching DCD channel information message and delivering out-of-band (OOB) messages included in the tuned-to tunnels to the device,

wherein the information distribution system is configured to output the out-of-band (OOB) messages and the downstream channel descriptor (DCD)channel information messages over a network, the OOB messages over the one or more tunnels where each tunnel is identified with a network address, and each DCD-channel information message over downstream channels and

wherein each DCD-channel information message identifies at least a portion of the network addresses associated with the one or more tunnels provided by the information distribution system and includes a listing of tunnel types and a listing of tunnel type identifiers for differentiating between different tunnels identified with a same tunnel type.

- 2. (Currently Amended) The apparatus of claim 4-32 wherein the device remains tuned to the one or more tunnels identified in the matching DCD message if an interrupt occurs to the tuned to tunnels.
- 3. (Previously Presented) The apparatus of claim 2 wherein the device remains tuned to the one or more tunnels identified in the matching DCD message as long as the matching DCD

message is being received by the modem.

- 4. (Previously Presented) The apparatus of claim 1 wherein the network addresses are media access control (MAC) addresses.
- 5. (Currently Amended) The apparatus of claim 1–32 wherein the CPE identifier is a tunnel identifier associated with one of the network addresses in the DCD message.
- 6. (Previously Presented) The apparatus of claim 5 wherein the tunnel identifier is a conditional access tunnel identifier.
- 7. (Previously Presented) The apparatus of claim 6 wherein the conditional access tunnel identifier is associated with a conditional access identification of a vendor of the CPE.
- 8. (Currently Amended) A system for Out-Of-Band (OOB) messaging, the system comprising:

a information distribution system, the information distribution system configured to output OOB messages and <u>channel information downstream channel descriptor (DCD)</u> messages over a network, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, each <u>channel information DCD</u> message being outputted over downstream channels and identifying at least a portion of the network addresses associated with the tunnels provided by the information distribution system, each <u>channel information DCD</u> message also including a listing of tunnel types and a listing of tunnel type identifiers for differentiating between different tunnels identified with a same tunnel type,; and

Customer Premises Equipment (CPE) having a device configured to output a CPE identifier and a modem in communication with the device, the modem receiving the CPE identifier and configured to scan downstream channels of the information distribution system for a matching channel information DCD message, the matching channel information DCD message having a channel information DCD message identifier that matches the CPE identifier, the modem tuning to the tunnels specified in the matching channel information DCD message and

delivering the OOB messages included in the tuned-to tunnels to the device.

- 9. (Currently Amended) The system of claim <u>8-33</u> wherein the device remains tuned to the tunnels identified in the matching DCD message if an interrupt occurs to the tuned-to tunnels.
- 10. (Previously Presented) The system of claim 9 wherein the device remains tuned to the tunnels identified in the matching DCD message as long as the matching DCD message is being received by the modem.
- 11. (Original) The system of claim 8 wherein the network addresses are media access control (MAC) addresses.
- 12. (Currently Amended) The system of claim <u>8-33</u> wherein the CPE identifier is a tunnel identifier associated with one of the network addresses in the DCD message.
- 13. (Previously Presented) The system of claim 12 wherein the tunnel identifier is a conditional access tunnel identifier.
- 14. (Previously Presented) The system of claim 13 wherein the conditional access tunnel identifier is associated with a conditional access identification of a vendor of the CPE.
- 15. (Currently Amended) A method comprising:

receiving out-of-band (OOB) messages and <u>channel informationdownstream channel</u> descriptor (DCD) messages, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, the <u>channel information DCD</u> messages being outputted over downstream channels and each including at least a portion of the network addresses associated with the tunnels provided by a information distribution system, each <u>channel information DCD</u> message also including a listing of tunnel types and a listing of tunnel type identifiers for differentiating between different tunnels identified with a same tunnel type;

scanning downstream channels of the information distribution system with a modem for

## the channel information DCD messages;

determining if one of the scanned channels includes a matching <u>channel information</u> DCD message, the matching <u>channel information</u> message having a <u>channel information</u> message identifier that matches a customer premises equipment (CPE) identifier; and

controlling the modem to tune to the tunnels specified in the matching <u>channel</u> <u>information</u> DCD message and to deliver the OOB messages included in the tuned-to tunnels to a device.

- 16. (Currently Amended) The method of claim 15-34 further comprising remaining tuned to the tunnels identified in the matching DCD message if an interrupt occurs to the tuned-to tunnels.
- 17. (Currently Amended) The method of claim 15-34 further comprising remaining tuned to the tunnels identified in the matching DCD message as long as the matching DCD message is being received by the modem.
- 18. (Currently Amended) The method of claim 15-34 further comprising outputting the CPE identifier from the device to the modem such that the modem determines whether the scanned channels include the matching DCD message.
- 19. (Currently Amended) The method of claim 15-34 further comprising outputting the CPE identifier from a conditional access unit of the CPE to the modem such that the modem determines whether the scanned channels include the matching DCD message.
- 20. (Currently Amended) The method of claim 15-34 wherein determining whether the scanned channels include the matching DCD message includes outputting the DCD message identifier included in the DCD messages of the scanned channels to the device such that the device determines whether the DCD message identifier matches the CPE identifier.
- 21. (Currently Amended) The method of claim <u>15-34</u> wherein determining whether the scanned channels include the matching DCD message includes outputting the DCD message identifier included in the DCD messages of the scanned channels to a conditional access unit of

the CPE such that the conditional access unit determines whether the DCD message identifier matches the CPE identifier.

- 22. (Original) The method of claim 15 further comprising associating the network addresses with media access control (MAC) addresses.
- 23. (Currently Amended) The method of claim 15-34 further comprising associating the CPE identifier with a tunnel identifier of one of the network addresses in the DCD message.
- 24. (Original) The method of claim 23 further comprising associating the tunnel identifier with a conditional access tunnel identifier.
- 25. (Original) The method of claim 24 further comprising associating the conditional access tunnel identifier with a conditional access identification of a vendor of the CPE.
- 26. (Currently Amended) An apparatus comprising:

a modem configured to scan downstream channels of a information distribution system for <u>channel information</u>downstream channel descriptor (DCD) messages and to output a <u>channel information</u>DCD message identifier included in the <u>channel information</u>DCD message; and

a device configured to determine whether the <u>channel informationDCD</u> message identifier matches with a customer premises equipment (CPE) identifier such that the device instructs the modem to continue scanning of the <u>channel informationDCD</u> messages if the <u>channel informationDCD</u> message identifier fails to match the CPE identifier and to tune to one or more tunnels identified by the network address in the <u>channel informationDCD</u> message if the <u>channel informationDCD</u> message identifier matches with the CPE identifier,

wherein the information distribution system is configured to output out-of-band (OOB) messages and the <u>channel informationdownstream channel descriptor (DCD)</u> messages over a network, the OOB messages over the one or more tunnels where each tunnel is identified with the network address, and each <u>channel information DCD</u> message over downstream channels and

wherein each channel information DCD message identifies at least a portion of the

network addresses associated with the one or more tunnels provided by the information distribution system and includes a listing of tunnel types and a listing of tunnel type identifiers for differentiating between different tunnels identified with a same tunnel type.

- 27. (Currently Amended) The apparatus of claim 26-35 wherein the device includes a conditional access unit to determine whether the DCD message identifier matches with the CPE identifier.
- 28. (Previously Presented) The apparatus of claim 26 wherein the device communicates with a conditional access unit.
- 29. (Previously Presented) The apparatus of claim 26, wherein the device comprises a set top box.
- 30. (Previously Presented) The apparatus of claim 26, wherein the modem comprises a cable modem.
- 31. (Previously Presented) The apparatus of claim 26, wherein the information distribution system comprises a cable modern termination system.
- 32. (New) The apparatus of claim 1, wherein each channel information message comprises a downstream channel descriptor (DCD) message and each channel information message identifier comprises a downstream channel descriptor (DCD) message identifier.
- 33. (New) The system of claim 8, wherein each channel information message comprises a downstream channel descriptor (DCD) message and each channel information message identifier comprises a downstream channel descriptor (DCD) message identifier.
- 34. (New) The method of claim 15, wherein each channel information message comprises a downstream channel descriptor (DCD) message and each channel information message identifier comprises a downstream channel descriptor (DCD) message identifier.

35. (New) The apparatus of claim 26, wherein each channel information message comprises a downstream channel descriptor (DCD) message and each channel information message identifier comprises a downstream channel descriptor (DCD) message identifier.